

Claim Amendments

Please amend the claims to be as follows.

1. (currently amended) A method of compiling a computer program with inline specialization, the method comprising:

given a call-graph, if multiple call-chains in the call-graph have a common call site, inlining the common call site in one or more of the call-chains, without necessarily inlining the common call site into all of said multiple call-chains having the common call site.
2. (original) The method of claim 1, further comprising:
whenever a call site from routine x to routine y is inlined, new edges are added from routine x to all routines inlinable within routine y.
3. (original) The method of claim 2, further comprising:
materialization of summary information for new call sites added to the call-graph.
4. (original) The method of claim 3, further comprising:
addition of the new call sites to the global work-list so that these call sites are considered for inlining.
5. (original) The method claim 4, further comprising:
addition of dependence relationships between call sites. If a new call site, y, is added because of inlining of call site, x, then y is dependent on x.
6. (original) The method of claim 5, further comprising:
patching of the new call site, y, during inline transformation of call site, x, with the aim of generating the intermediate transformation for call site, y.

7. (currently amended) An apparatus for compiling a computer program with inline specialization, the apparatus comprising:
means to inline a common call site in one or more call-chains in a call-graph, without
~~necessarily~~ inlining the common call site into all call-chains having the
common call site.
8. (original) The apparatus of claim 7, wherein whenever a call site from routine x to routine y is inlined, new edges are added from routine x to all routines inlinable within routine y.
9. (original) The apparatus of claim 8, wherein materialization of summary information for new call sites added to the call-graph is performed.
10. (original) The apparatus of claim 9, wherein the new call sites are added to the global work-list so that these are considered for inlining.
11. (original) The apparatus of claim 10, wherein dependence relationships are created between call sites.
12. (original) The apparatus of claim 11, wherein the inline transformation patches up the intermediate representation of the new call sites (by considering the dependence relationships) before potentially inlining them.
13. (currently amended) A computer program product comprising a computer-usable medium having computer-readable code embodied therein, the computer program product being a source code compiler with cross-module optimization, the compiler including an inline specialization feature such that given a call-graph, if multiple call-

chains in the call-graph have a common call site, the common call site is inlined in one or more of the call-chains, without necessarily being inlined into all of the multiple call-chains having the common call site.